AIR RESOURCES BOARD APPLICATION FORM FOR COMPLIANCE WITH THE FILL PIPE REQUIREMENTS

Manufacturer **May 2018 Workshop Draft** **Model Year**

The nomenclature and symbols used below are the same as those defined in "Specifications for Fill Pipes and Openings of 2015 and Subsequent Motor Vehicle Fuel Tanks", amended March 22, 2012 (Refer to ISO-13331-1995(E) as adopted June 1, 1995)

	General Specification	ARB Specification	ISO-13331 Reference Section/Figure (n1)	Manufacturer Specification (n2)		
1	Angle α in degrees	$-10° < \alpha < 20°$	2.8 & 3.4/Fig 2a & 3a			
2	Spill Prevention in degrees (angle between centerline of test spout in its resting position and the horizontal plane).	30° (MIN)	3.5			
3	Test nozzle penetration of restrictor	2.25 cm or 22.5 mm(MIN)	3.4			
4	Angle β in degrees	none	2.9/Fig 2b & 3b			
	Fill Pipe Specification					
1	Fill Pipe face surface in TIR	0.025 cm or 0.25 mm(MAX)	3.1/Fig 1			
2	Fill Pipe face outside diameter	5.75 cm or 57.5 mm(MAX)	3.1/Fig 1			
		5.20 cm or 52.0 mm (MIN)	3.1/Fig 1			
3	Internal locking lip in degrees of the inside circumference	100° (MIN)	3.2/Fig 2 and 3			
	(a) degrees extending each side of	35° (MIN) LS (n3)	3.2/Fig 2 and 3			
		each side RS (n3)	3.2/Fig 2 and 3			
4	Height of lip measured from fill pipe inside wall; or	0.25 cm or 2.5 mm(MIN)	3.2			
	height of lip measured from fill pipe outside wall for outside diameters between 5.20 and 5.75 cm.	0.85 cm or 8.5 mm(MIN)	3.2			
5	Depth of lip (D) in centimeters	$0.4 \leq D \leq 1.0$ (n4) or: $0.4 < D < 1.3$	3.2			
	Offset					
	Offset A	none	3.3.1/Fig 5 shown as "**f**"			
	Offset B	none	3.3.1/Fig 5 shown as "**g**"			
6	Fill Pipe Face Clearance (Axial)	0.25 cm or 2.5 mm (MIN)	Fig 5 shown as "**2.5**"			
7	Fill Pipe Face Clearance (Radial)	40 mm (MIN)	Fig 5 shown as "**R40**"			
8	Fill Pipe Face Inside Diameter	49.8 mm(MAX)	Fig 1			
9	Bench Leak Test (n4)	2.5 L/Min (MAX) at 500 Pa Vacuum				
10	Capped or Capless					
11	Seal (Mechanical or Liquid)					
12	Disruption in the Fill Pipe Face					
13	ORVR Design (I / NI / NIRCO / NO) (n5)					
14	Type (Threaded or Bayonet)		Fig 1			
15	Usage of Design (Models or Evaporative Family(s))					
16	Total vehicle model year sales					

(n1): For Figures 1 through 5, please refer to ISO-13331-1995(E)

(n2): dimension should include adverse tolerance condition (n3): LS = Left side of reference plane, RS = Right side of reference plane

(n4): subject to phase in schedule in section XII of "Specifications for Fill Pipes and Openings of 2015 and Subsequent Motor Vehicle Fuel Tanks"

(n5) ORVR Design : Integrated (**I**)/Non-Integrated(**NI**)/Non-Integrated Refueling Canister Only (**NIRCO**)/Non-ORVR(**NO**)